

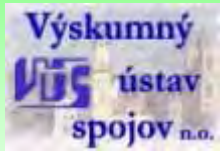


„Hodnotenie e-governmentu na celom svete z pohľadu UNO“.



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Agenda



1. About VÚS
2. Survey Methodology - EGDI (United Nations e-government development index)
3. Survey results
4. Strategic recommendations
5. Resume



Courtesy of United Nations

- The information in this presentation is given with courtesy of United Nations.
- Original source: United Nations E-government survey 2010
- <http://unpan1.un.org/intradoc/groups/public/documents/un/unpan038851.pdf>
- <http://www2.unpan.org/egovkb/datacenter/CountryView.aspx>



1 About VÚS



- VÚS or Výskumný ústav spojov, nezisková organizácia or Research Institute of Posts and Telecommunications, non-profit organization.
- Independent (not influenced by commercial interests) **non-profit organization** aimed at public welfare interests. It has experience in e-government and intelligent transport systems. **ISO 9001** holder.
- Preparation of crucial strategic, conceptual, legislative and technical documents for **e-government (top level)**.
- In e-government active since 2000. Addressees are predominantly from the **central ministry** which is responsible for e-government introduction in Slovakia on the top level.
- A member of working group at European Commission which evaluated e-government progress within initiative eEurope 2003+.
- More on <http://www.vus.sk>



2 Survey Methodology

- The United Nations e-government development **index (EGDI)** is a comprehensive scoring of the willingness and capacity of national administrations to use online and mobile technology in the execution of government functions.
- It is based on a comprehensive survey of the online presence of all **192** Member States.



Survey Methodology

- The e-government development index is **not** designed to capture e-government development in an **absolute sense**.
- Rather, the index rates the performance of national governments **relative to one another**. The maximum possible value is one and the minimum is zero.



The United Nations e-government development index

Mathematically, the EDGI is a weighted average of three normalized scores on the most important dimensions of e-government, namely:

1. scope and quality of online services,
2. telecommunication connectivity, and
3. human capacity.

EGDI =

$$\begin{aligned} & (0.34 \times \text{online service index}) + \\ & (0.33 \times \text{telecommunication index}) + \\ & (0.33 \times \text{human capital index}) \end{aligned}$$



Online service index (1/3)

- To arrive at a set of online service index values, the research team assessed each country's **national website** as well as the websites of the ministries of education, labour, social services, health and finance. Associated portals and subsidiary websites were considered part and parcel of the parent sites and taken into consideration when assigning values to survey responses.
- Among other things, the national sites were tested for a minimal level of Web content accessibility as described in the **Web Content Accessibility Guidelines** of the World Wide Web Consortium.



Online service index (1/3)

- The value for a given country is equal to the total number of points scored by that country less the lowest score for any country divided by the range of values for all countries in the survey. For example, if country “x” were to score 233, with the lowest score of any country equal to 20 and the highest equal to 403, then the online services value for country “x” would be:
- Online service index (country “x”) = $(233-20)/(403-20) = 0.5561$



Online service index (1/3)

- The research team followed a **citizen-centric** approach to assessment of online services, among other things by putting themselves in the place of the average user. thus, responses were generally based on whether the relevant feature(s) could be found and **accessed easily**, not whether they in fact exist. As the number of national websites grows, this becomes increasingly important. While it is possible, although implausible, to spend hours browsing a government website meticulously for all content and features, this approach misses the key point that for information and services to be “usable” they must be readily discoverable by the intended beneficiaries.



Telecommunication index (2/3)

The telecommunication infrastructure index is a composite of five indicators:

1. number of personal computers per 100 persons,
2. number of Internet users per 100 persons,
3. number of telephone lines per 100 persons,
4. number of mobile cellular subscriptions per 100 persons and
5. number of fixed broadband subscribers per 100 persons.



Telecommunication index (2/3)

- Each of these indicators was normalized by taking its value for a given country subtracting the lowest value for any country in the survey and dividing by the range of values for all countries. For example, if country “x” were to have 36.69 Internet users per 100 inhabitants, with the lowest value of any country equal to 0 and the highest equal to 88.87, then the normalized value of this indicator for country “x” would be given by:
- Internet penetration index (country “x”) =
$$(36.69-0)/(88.87-0) = 0.4129$$



Telecommunication index (2/3)

- The telecommunication infrastructure index for country “x” is then the simple arithmetic mean of each of the five normalized indicators derived in this way:
- Telecommunication infrastructure index =
- Average
- (personal computer index
+ Internet user index
+ telephone line index
+ mobile subscription index
+ fixed broadband index)



Human capital index (3/3)

- The human capital index is a composite of two indicators: adult literacy rate and the combined primary, secondary, and tertiary gross enrollment ratio.
- The two indicators were normalized by taking their values for a given country subtracting the lowest value for any country in the survey and dividing by the range of values for all countries. For example, if country “x” were to have an adult literacy rate of 66.8 per 100 inhabitants, with the lowest value of any country equal to 28.7 and the highest equal to 99.5, then the normalized value of this indicator for country “x” would be given by:
- Adult literacy index (country “x”) =
$$(66.8-28.7)/(99.5-28.7)= 0.5381$$



Human capital index (3/3)

- The human capital index for country “x” is then the weighted arithmetic mean of the two normalized indicators derived in this way with adult literacy assigned a weight of 0.6667 and gross enrollment 0.3333:
- Human capital index =
 $\frac{2}{3} \times \text{adult literacy index} +$
 $\frac{1}{3} \times \text{gross enrollment index}$



Supplementary e-participation index

- The e-participation questions expand the survey by emphasizing **quality** in the connected presence stage of e-government. these questions focus on the use of the Internet to facilitate provision of information by governments to citizens (“e-information sharing”), interaction with stakeholders (“e-consultation”) and engagement in decision-making processes (“e-decision making”).
- A country’s e-participation index value reflects **how useful these features are** and the extent to which they have been deployed by the government compared to all other countries. The purpose of this measure is not to prescribe any particular practice, but rather to offer insight into how different countries are using online tools to promote interaction between citizen and government, as well as among citizens, for the benefit of all.



Supplementary e-participation index

- The e-participation index calculated in this way is then normalized by taking their values for a given country subtracting the lowest value for any country in the survey and dividing by the range of values for all countries. For example, if country “x” were to have an e-participation score of 30, with the lowest value of any country equal to 0 and the highest equal to 45, then the normalized index value for country “x” would be given by:
 - E-participating index (country “x”) =
 - $(30-0)/(45-0)= 0.6667$

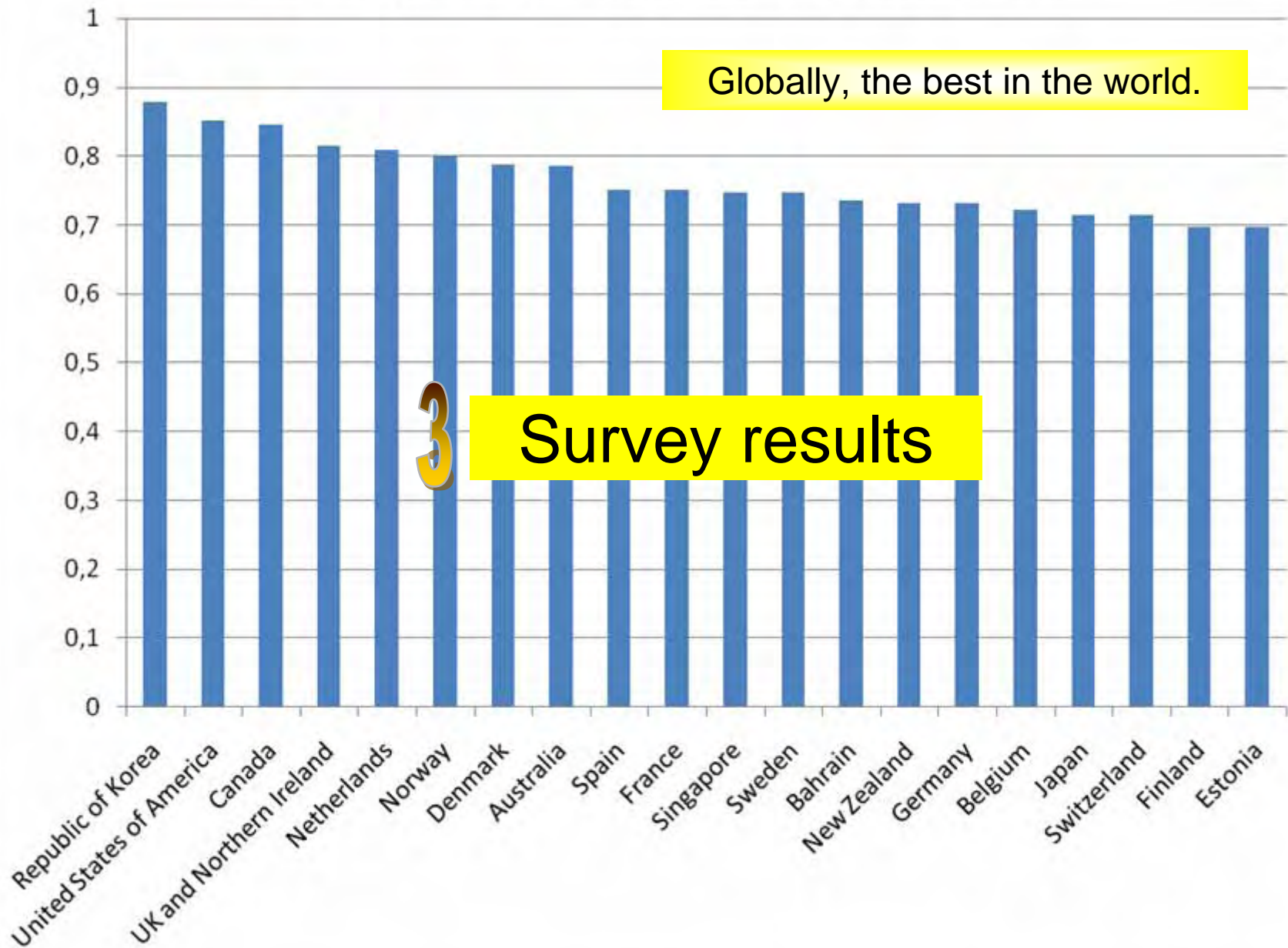


E-Government Development Index (Top 20 Countries)

Source: http://www2.unpan.org/egovkb/global_reports/10report.htm

Globally, the best in the world.

3 Survey results

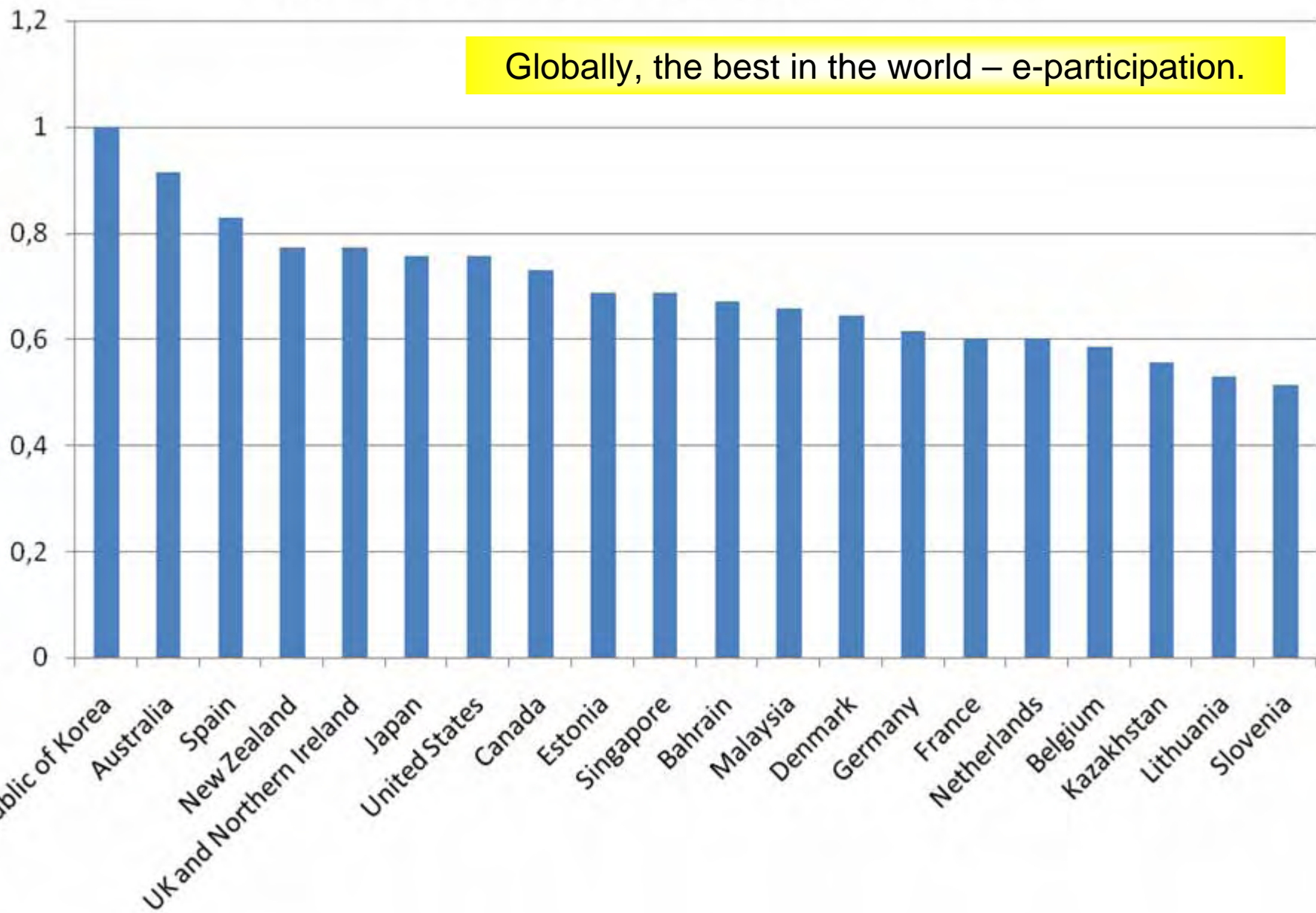




E-Participation Index (Top 20 Countries)

http://www2.unpan.org/egovkb/global_reports/10report.htm

Globally, the best in the world – e-participation.





Country

E-Government
2010



















Rank
2010

Rank
2008

Rank
Change

The best in the world - progress.


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jov n.o.

Country	E-Government 2010	Rank 2010	Rank 2008	Rank Change
 Republic of Korea	0.8785	1	6	+5 
 United States of America	0.8510	2	4	+2 
 Canada	0.8448	3	7	+4 
 United Kingdom of Great Britain and Northern Ireland	0.8147	4	10	+6 
 Netherlands	0.8097	5	5	--
 Norway	0.8020	6	3	-3 
 Denmark	0.7872	7	2	-5 
 Australia	0.7863	8	8	--
 Spain	0.7516	9	20	+11 
 France	0.7510	10	9	-1 

Country		E-Government 2010	Rank 2010	Rank 2008	Rank Change
 Hungary		0.6315	27	30	+3 ↑
 Czech Republic		0.6060	33	25	-8 ↓
 Slovakia		0.5639	43	38	-5 ↓
 Bulgaria		0.5590	44	43	-1 ↓
 Poland		0.5582	45	33	-12 ↓
 Romania		0.5479	47	51	+4 ↑
 Ukraine		0.5181	54	41	-13 ↓
 Russian Federation		0.5136	59	60	+1 ↑
 Belarus		0.4900	64	56	-8 ↓
 Republic of Moldova		0.4611	80	93	+13 ↑

Country		Online Service 2010	Rank 2010	Rank 2008	Rank Change
 Hungary		0.5048	27	24	-3 ↓
 Czech Republic		0.4540	37	21	-16 ↓
 Romania		0.4159	42	73	+31 ↑
 Bulgaria		0.4095	45	52	+7 ↑
 Poland		0.3873	50	40	-10 ↓
 Slovakia		0.3460	62	56	-6 ↓
 Ukraine		0.3460	62	42	-20 ↓
 Russian Federation		0.3302	68	92	+24 ↑
 Belarus		0.3016	83	94	+11 ↑
 Republic of Moldova		0.2952	84	97	+13 ↑

E-Government: 2010 – 2008 - 2005

Country	E-Government 2010	2008	2005
 Belarus	0.4900	0.5213	0.5318
 Bulgaria	0.5590	0.5719	0.5605
 Czech Republic	0.6060	0.6696	0.6396
 Hungary	0.6315	0.6494	0.6536
 Poland	0.5582	0.6134	0.5872
 Republic of Moldova	0.4611	0.4510	0.3459
 Romania	0.5479	0.5383	0.5704
 Russian Federation	0.5136	0.5120	0.5329
 Slovakia	0.5639	0.5889	0.5887
 Ukraine	0.5181	0.5728	0.5456

Country**Online****Online Services: 2010 – 2008 - 2005****Price****2010****2008****2005** [Belarus](#)

0.3016

0.3278


0.4885

 [Bulgaria](#)

0.4095

0.4849

0.5192

 [Czech Republic](#)

0.4540

0.6455

0.5885

 [Hungary](#)

0.5048

0.6171


0.7038

 [Poland](#)

0.3873

0.5385

0.5115

 [Republic of Moldova](#)

0.2952

0.3110

0.0538

 [Romania](#)

0.4159

0.4147

0.6423

 [Russian Federation](#)

0.3302

0.3344

0.4538

 [Slovakia](#)

0.3460

0.4749

0.5385












 [Ukraine](#)

0.3460

0.5351

0.5808

Human Capital: 2010 – 2008 - 2005

Country		Human Capital		
		2010	2008	2005
 Belarus		0.9659	0.9597	0.9500
 Bulgaria		0.9350	0.9262	0.9100
 Czech Republic		0.9429	0.9362	0.9200
 Hungary		0.9597	0.9604	0.9500
 Poland		0.9551	0.9560	0.9600
 Republic of Moldova		0.8999	0.8931	0.8700
 Romania		0.9226	0.9047	0.8800
 Russian Federation		0.9396	0.9589	0.9500
 Slovakia		0.9310	0.9211	0.9100
 Ukraine		0.9647	0.9508	0.9400

Country**Infra****Infrastructure: 2010 – 2008 - 2005****ure****2010****2008****2005** [Belarus](#)

0.2080

0.2823

0.1571

 [Bulgaria](#)

0.3370

0.3071

0.2522

 [Czech Republic](#)

0.4258

0.4279

0.4102

 [Hungary](#)

0.4338

0.3716

0.3069

 [Poland](#)

0.3373

0.3481

0.2901

 [Republic of Moldova](#)

0.1933

0.1532

0.1138

 [Romania](#)

0.3092

0.2992

0.1889

 [Russian Federation](#)

0.2765

0.2482

0.1947

 [Slovakia](#)

0.4211

0.3742

0.3176

 [Ukraine](#)

0.2486

0.2336

0.1161

E-participation: 2010 – 2008 - 2005

Country		E-Participation	2010	2008	2005
 Belarus			0.2429	0.0909	0.2698
 Bulgaria			0.3000	0.0455	0.2540
 Czech Republic			0.1286	0.2045	0.2063
 Hungary			0.3143	0.2045	0.3810
 Poland			0.2429	0.2273	0.3492
 Republic of Moldova			0.2000	0.0682	0
 Romania			0.1857	0.0455	0.3175
 Russian Federation			0.1286	0.0909	0.1429
 Slovakia			0.0714	0.0682	0.1746
 Ukraine			0.2571	0.5682	0.3651

Eastern Europe - Summary 2010

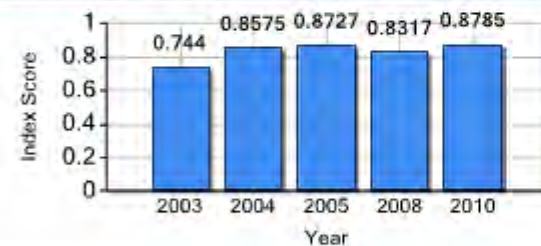


Country	Rank	E-Readiness Index	Web Measure Index	Human Capital Index	Infrastructure Index	E-Participation Index
 Belarus	64	0.4900	0.3016	0.9659	0.2080	0.2429
 Bulgaria	44	0.5590	0.4095	0.9350	0.3370	0.3000
 Czech Republic	33	0.6060	0.4540	0.9429	0.4258	0.1286
 Hungary	27	0.6315	0.5048	0.9597	0.4338	0.3143
 Poland	45	0.5582	0.3873	0.9551	0.3373	0.2429
 Republic of Moldova	80	0.4611	0.2952	0.8999	0.1933	0.2000
 Romania	47	0.5479	0.4159	0.9226	0.3092	0.1857
 Russian Federation	59	0.5136	0.3302	0.9396	0.2765	0.1286
 Slovakia	43	0.5639	0.3460	0.9310	0.4211	0.0714
 Ukraine	54	0.5181	0.3460	0.9647	0.2486	0.2571



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Country E-Government Index Trend



Country At-a-Glance

Website	http://www.egov.go.kr
Region	Asia
Sub-region	Eastern Asia
Income *	High income
Population	46.14 million
E-Government Rank	1 out of 184

Country Data Comparison

Compare to:

E-Government Index ?

Republic of Korea

0.879

World Average

0.441

Online Service Index ?

Republic of Korea

1.000

World Average

0.286

Infrastructure Index ?

Republic of Korea

0.639

World Average

0.236

Human Capital Index ?

Republic of Korea

0.993

World Average

0.797

E-Participation Index ?

Republic of Korea

1.000

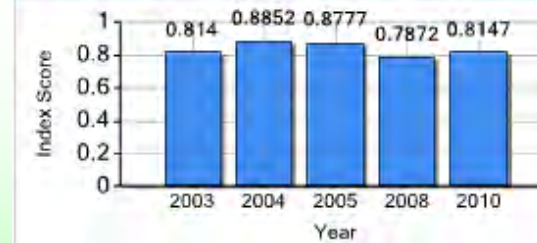
World Average

0.205



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Country E-Government Index Trend



Country At-a-Glance

Website	http://www.direct.gov.uk
Region	Europe
Sub-region	Northern Europe
Income *	High income
Population	58.79 million
E-Government Rank	4 out of 184

Country Data Comparison

Compare to:

E-Government Index ?

United Kingdom of Great B and Northern Ireland

0.815

World Average

0.441

Online Service Index ?

United Kingdom of Great B and Northern Ireland

0.775

World Average

0.286

Infrastructure Index ?

United Kingdom of Great B and Northern Ireland

0.716

World Average

0.236

Human Capital Index ?

United Kingdom of Great B and Northern Ireland

0.954

World Average

0.797

E-Participation Index ?

United Kingdom of Great B and Northern Ireland

0.771

World Average

0.205



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Country Data Comparison

Compare to:

E-Government Index ?

Hungary

0.632

World Average

0.441

Online Service Index ?

Hungary

0.505

World Average

0.286

Infrastructure Index ?

Hungary

0.434

World Average

0.236

Human Capital Index ?

Hungary

0.960

World Average

0.797

E-Participation Index ?

Hungary

0.314

World Average

0.205



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Country Data Comparison

Compare to:

E-Government Index ?

Poland

0.558

World Average

0.441

Online Service Index ?

Poland

0.387

World Average

0.286

Infrastructure Index ?

Poland

0.337

World Average

0.236

Human Capital Index ?

Poland

0.955

World Average

0.797

E-Participation Index ?

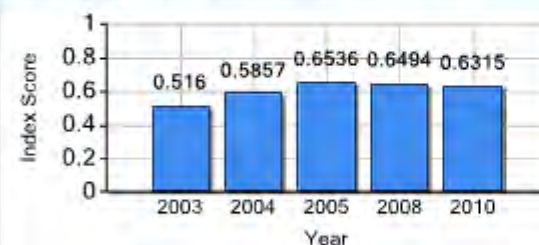
Poland

0.243

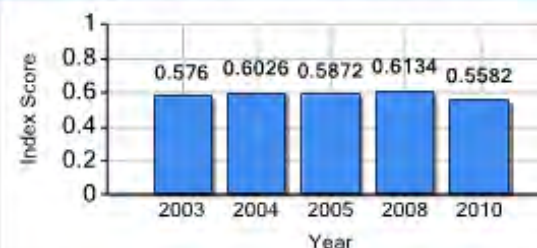
World Average

0.205

Country E-Government Index Trend



Country E-Government Index Trend



Country At-a-Glance

Website	http://www.magyarorszag.hu
Region	Europe
Sub-region	Eastern Europe
Income *	Upper middle income
Population	10.20 million
E-Government Rank	27 out of 184

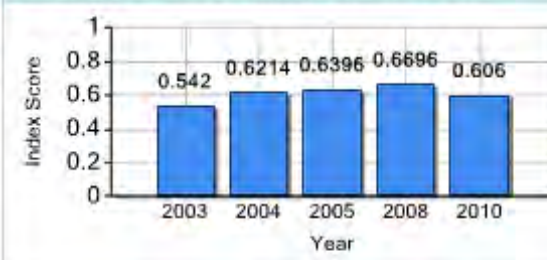
Country At-a-Glance

Website	http://www.kprm.gov.pl
Region	Europe
Sub-region	Eastern Europe
Income *	Upper middle income
Population	38.23 million
E-Government Rank	45 out of 184



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Country E-Government Index Trend



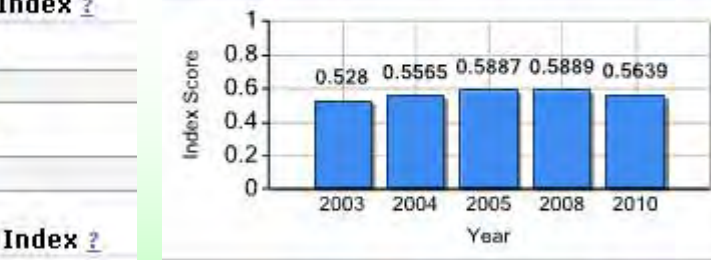
Country At-a-Glance

Website	http://www.vlada.cz
Region	Europe
Sub-region	Eastern Europe
Income *	Upper middle income
Population	10.23 million
E-Government Rank	33 out of 184



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Country E-Government Index Trend



Country At-a-Glance

Website	http://www.government.gov.sk
Region	Europe
Sub-region	Eastern Europe
Income *	Upper middle income
Population	5.38 million
E-Government Rank	43 out of 184

Country Data Comparison

Compare to:

E-Government Index ?

Czech Republic



World Average



Online Service Index ?

Czech Republic



World Average



Infrastructure Index ?

Czech Republic

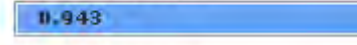


World Average



Human Capital Index ?

Czech Republic



World Average



E-Participation Index ?

Czech Republic



World Average



Country Data Comparison

Compare to:

E-Government Index ?

Slovakia



World Average



Online Service Index ?

Slovakia



World Average



Infrastructure Index ?

Slovakia



World Average



Human Capital Index ?

Slovakia



World Average



E-Participation Index ?

Slovakia



World Average





4 Strategic recommendations

1. **Transparency.** Initial investments in transparency required are quickly offset by the outcomes generated, such as increased savings and enhanced public trust.
2. **Open data.** By enacting open data principles, governments lay down the foundations that reduce the entry barriers for non-governmental parties, thus allowing for the co-production of public services at minimal costs for governments and taxpayers.



Strategic recommendations

- 3. User-centricity.** The extent to which user-centricity is a component of each of the initiatives is a factor in its success. Here exists a nearly systematic discrepancy between the offer of e-government facilities and the actual take-up of the services offered. This indicates that, less than a technological issue, **users' take-up** depends ultimately on the extent to which services are able to effectively address their needs and preferences.
- 4. Innovation.** Although governments cannot easily afford to make mistakes, risk-aversion should not have the upper hand over innovation.

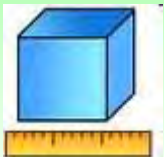


Strategic recommendations

5. **Out of crisis.** E-government clearly has a potential role in alleviating the worst symptoms of the ongoing world financial crisis.
6. **E-participation.** E-government provides the public with an opportunity to have their views expressed. Whether governments take notice may be another matter, but the result will be increase in transparency and democratization.



5 Resume



1. It is critical to **measure the** progress of e-government in one's country in comparison to other countries.



2. UN **surveys** covering e-government in all the world are excellent source of this information.



3. A serious analysis of the data of UN survey in order to find better ways in building up e-government may accelate the e-government process.

Thank you for your Attention.

